



Help-seeking behavior during elevated temperature in Chinese population

Author(s): Chan EY, Goggins WB, Kim JJ, Griffiths S, Ma TK
Year: 2011
Journal: Journal of Urban Health : Bulletin of The New York Academy of Medicine. 88 (4): 637-650

Abstract:

The negative impact of extreme temperatures on health is well-established. Individual help-seeking behavior, however, may mitigate the extent of morbidity and mortality during elevated temperatures. This study examines individual help-seeking behavior during periods of elevated temperatures among a Chinese population. Help-seeking patterns and factors that influence behavior will be identified so that vulnerable subgroups may be targeted for health protection during heat crises. A retrospective time-series Poisson generalized additive model analysis, using meteorological data of Hong Kong Observatory and routine emergency help call data from The Hong Kong Senior Citizen Home Safety Association during warm seasons (June-September) 1998-2007, was conducted. A "U"-shaped association was found between daily emergency calls and daily temperature. About 49% of calls were for explicit health-related reasons including dizziness, shortness of breath, and general pain. The association with maximum temperature was statistically significant (p Euro Surveillance (Bulletin European Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 0.034) with the threshold temperature at which the frequency of health-related calls started to increase being around 30-32 degrees C. Mean daily relative humidity (RH) also had a significant U-shaped association with daily emergency health-related calls with call frequency beginning to increase with RH greater than 70-74% (10-25% of the RH distribution). Call frequency among females appeared to be more sensitive to high temperatures, with a threshold between 28.5 degrees C and 30.5 degrees C while calls among males were more sensitive to cold temperatures (threshold 31.5-33.5 degrees C). Results indicate differences in community help-seeking behavior at elevated temperatures. Potential programs or community outreach services might be developed to protect vulnerable subgroups from the adverse impact of elevated temperatures.

Source: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3157502>

Resource Description

Exposure : ☑

weather or climate related pathway by which climate change affects health

Air Pollution, Meteorological Factors, Temperature, Other Exposure

Air Pollution: Ozone, Particulate Matter, Other Air Pollution

Air Pollution (other): NO₂;SO₂

Temperature: Extreme Cold, Extreme Heat, Fluctuations

Other Exposure: dew point

Geographic Feature: ☒

resource focuses on specific type of geography

Urban

Geographic Location: ☒

resource focuses on specific location

Non-United States

Non-United States: Asia

Asian Region/Country: China

Health Impact: ☒

specification of health effect or disease related to climate change exposure

Morbidity/Mortality

Population of Concern: A focus of content

Population of Concern: ☒

populations at particular risk or vulnerability to climate change impacts

Elderly, Low Socioeconomic Status

Resource Type: ☒

format or standard characteristic of resource

Research Article

Timescale: ☒

time period studied

Time Scale Unspecified